CLAIMS

What is claimed is:

1. A mix head assembly for a molding system comprising:

a mixer chamber having an output port, said mixer chamber defining an axis;

a mixer mounted within said mixer chamber, said mixer rotatable about said axis; and

a plunger movably mounted within said chamber, said plunger movable along said axis to telescope over said mixer.

2. The mix head assembly as recited in claim 1, wherein said mixer comprises a plurality of vanes extending perpendicular to said axis.

3. The mix head assembly as recited in claim 2, wherein said plurality of vanes extend along a longitudinal length of said mixer.

Rule 1.75(f)

4. The mix head assembly as recited in claim 2, wherein each of said plurality of vanes define a plurality of steps.

5. The mix head assembly as recited in claim 4, wherein said plurality of steps are located on one side of each of said plurality of vanes.

6. The mix head assembly as recited in claim 5, wherein said one side of each of said plurality of vanes leads a direction of rotation of said mixer.

7. The mix head assembly as recited in claim 1, wherein an inner configuration of said plunger corresponds with an outer configuration of said mixer.

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7. The mix head assembly as recited in claim 1, further comprising a shaft extending along said axis, said axis rotatably driving said mixer.

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8. The mix head assembly as recited in claim 7, wherein said plunger moves relative to said shaft.

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9. The mix head assembly as recited in claim 1, further comprising a rotationally fixed mixer, said plunger movable along said axis toward said exit port to telescope over said fixed mixer prior to telescoping over said mixer.

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10. The mix head assembly as recited in claim 1, wherein said chamber defines an input port adjacent said fixed mixer.

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11. A mix head assembly for a molding system comprising:

a mixer chamber having an output port, said mixer chamber defining an axis;

a mixer mounted within said mixer chamber, said mixer rotatable about said axis;

a plurality of vanes extending perpendicular to said axis;

a plurality of steps located on a leading side of each of said plurality of vanes; and

a plunger movably mounted within said chamber, said plunger movable along said axis to telescope over said mixer.

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12. The mix head assembly as recited in claim 11, wherein said plurality of vanes extend along a longitudinal length of said mixer.

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13. The mix head assembly as recited in claim 11, wherein said plurality of steps are located on one side of each of said plurality of vanes.

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14. The mix head assembly as recited in claim 13, wherein said one side of each of said plurality of vanes leads a direction of rotation of said mixer.

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15. The mix head assembly as recited in claim 11, wherein an inner configuration of said plunger corresponds with an outer configuration of said mixer.

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16. The mix head assembly as recited in claim 11, further comprising a rotationally fixed mixer, said plunger movable along said axis toward said exit port to telescope over said fixed mixer prior to telescoping over said mixer.